

**City of Flagstaff**  
**January 1, 2000 – December 31, 2000**  
***Report to Consumers on Water Quality***

Este informe contiene información muy importante sobre su  
agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Díí hane', tooh' ní dláání baahané. Há' zhooi bí'ki'd díí tít, a dóo da' goo,  
Dine' kea'ghíí oltaa éé na' yéé dóól tah'.



Our goal is to provide you with high-quality, safe, drinking water that not only meets but also exceeds every federal and state standard. As mandated by the Safe Drinking Water Act (SDWA), this “Consumer Confidence Report” details our water sources, the results of our water quality tests for calendar year 2000, and other information. Copies of this report are available at Utilities Administration, City Hall, 211 W. Aspen Ave., Flagstaff, AZ 86001. You can count on the City of Flagstaff for quality on tap. Our results show it.

**Bottom Line: The City of Flagstaff’s drinking water meets or surpasses all federal and state drinking-water standards.**

We encourage public interest and participation in our community’s decisions affecting drinking water. Regular Water Commission meetings occur on the third Thursday of each month. The meeting locations are posted on the official City bulletin board at City Hall, 211 W. Aspen Avenue. Meetings begin at 4:00 PM and the public is always welcome.

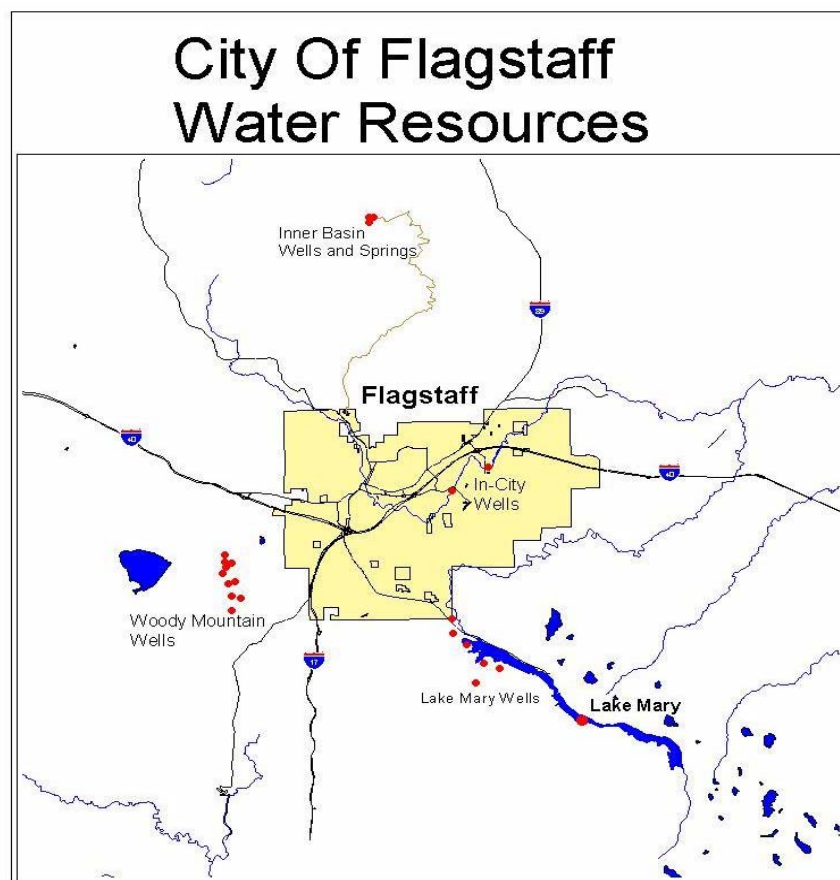
## Overview

In 2000, your Utilities Department distributed approximately 2.9 billion gallons of water to Flagstaff customers. Total water production has increased 12% over 1999. This is attributable to growth and the dry summer we had last year.

Last year we conducted approximately 2,407 tests for 149 contaminants in our water. As in years past, we did not detect contaminant levels higher than the Environmental Protection Agency (EPA) or state allows. The information you see in this report only addresses detected contaminants. We have chosen not to report information for contaminants tested for and not detected. There were no violations of the Safe Drinking Water Act during 2000.

## Water Source

The City of Flagstaff is supplied by surface water from Upper Lake Mary and the Inner Basin of the San Francisco Peaks. We also pump groundwater from the Woody Mountain Wellfield, Lake Mary Wellfield, and other “in city” wells which tap the Coconino and Supai Aquifers. These sources blend in the water distribution system and the amount of water coming from each source may vary during the year.



## What Does the Following Table Mean?

The table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. The data you see in the table is a result of testing completed during calendar year 2000 in compliance with current regulations. Definitions of MCL and MCLG are important.

**Maximum Contaminant Level or MCL:** The highest level of a regulated contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must meet.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

### Key to Table

AL=Action Level  
MCL=Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
NTU = Nephelometric Turbidity Units  
pCi/l = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)  
ppb = parts per billion, or micrograms per liter (µg/l)

## Water Quality Table

Contaminant	Date Tested	Unit	MCL	MCLG	Highest Detected Amount*	Range	Major Sources	Violation
<b>Inorganic Contaminants</b>								
Arsenic	9/5/00	ppb	50	n/a	8.9	0 – 8.9	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	NO
Barium	9/5/00	ppm	2	2	0.64	0.053 - 0.64	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	NO
Chromium	8/2/00	ppb	100	100	7.3	0 – 7.3	Discharge from steel and pulp mills; erosion of natural deposits	NO
Copper	10/23/00	ppm	AL=1.3	1.3	.0022	0 - 0.0022	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	NO
Fluoride	6/14/00	ppm	4	4	.33	0.07 - .33	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	NO
Contaminant	Date	Unit	MCL	MCLG	Highest	Range	Major Sources	Violation

	Tested				Detected Amount*			
Nitrate	10/23/00	ppm	10	10	2	0 - 2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
Sodium	10/23/00	ppm	N/A	N/A	7.3	2.9-7.3	Natural erosion	NO
Sulfate	8/2/00	ppm	N/A	N/A	10	2.11-10	Natural erosion, industrial wastes	NO

### Microbiological Contaminants

<sup>1</sup> Turbidity	4/12/00	NTU	5	0	.52	.03-.52	Soil runoff	NO
<sup>1</sup> Turbidity	4/00	NTU	<0.5 <sup>3</sup>	0	<0.5 <sup>4</sup>		Soil runoff	NO

### Volatile Organic Contaminants

<sup>2</sup> TTHMs [Total Trihalomethanes]	Quarterly	ppb	100	0	22 <sup>5</sup>	14-22	By-product of drinking water chlorination	NO
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### Water-Quality Table Footnotes

- <sup>1</sup> Turbidity is a measurement of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system and an indicator of the absence of microbiological contamination
- <sup>2</sup> Compliance with TTHMs is based on a running annual average. The highest running annual average during 2000 was 22.4 ppb
- <sup>3</sup> 95% of the time
- <sup>4</sup> 99.1% of the time
- <sup>5</sup> Highest running average
- \* This column shows the results of tests on our finished water



## Required Additional Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised person such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider. EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses, bacteria, and protozoan which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, include synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## National Primary Drinking Water Regulations Compliance

We'll be happy to answer questions about the City of Flagstaff's water quality. Call Jack Rathjen at the Lake Mary Treatment Plant at 520-774-0262. Water Quality Data for community water systems throughout the United States is also available at [www.waterdata.com](http://www.waterdata.com).